# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start		Rating **	Α	Issue No. 19				
LM End		Issue Type +	Ма	Location *	*			
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item		nergency Supplies &			0		0	
item	Equipment				0		0	
DWR ID	DWR_MA0001_01_s _ 2016_19							
		Comn	nent Cod	de				
		Inspecto	or Comm	nent				
The LMA h	nas emerg	ency supplies	and equ	ipment.				

No Photos

LM Start		Rating **	Α	Issue No.		28	
LM End		Issue Type +	Ma	Location *			
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Item		Operations & Maintenance			0		0
пеш	Manuals			0		0	
DWR ID	DWR_MA0001_01_s _ 2013_28						
		Comn	nent Coc	de			
		Inspecto	or Comm	nent			
The LMA h	nas O&M r	nanuals.					

No Photos

LM Start		Rating **	Α	Issue No.		29		
LM End		Issue Type +	Ма	Location *				
Category	Earthen L	evee		GPS Latitude/Longitude				
Category				Start		End		
Item	Flood Pre	paredness &	Training		0		0	
					0		0	
DWR ID	DWR_MA0	DWR_MA0001_01_s _ 2013_29						
		Comn	nent Cod	le				
		Inspecto	or Comm	ent				
The LMA	completed	flood fight trai	ining in 2	2019.				

No Photos

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	0.01	Rating **	N	Issue No.		92		
LM End	0.01	Issue Type +	Ma	Location *		LS		
Cotogony	Earthen Levee			GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Trim / Thi	n Trees		39.2140	00 °	39.214000 °		
пеш					77 °	-122.001077 °		
DWR ID	DWR_MA0	001_01_f _ 201	6_92					
		Comn	nent Cod	de				
T5 : Tree s	stumps.							
	Inspector Comment							

No Photos

LM Start	0.09	Rating **	A/W	Issue No.	No. 94			
LM End	0.09	Issue Type +	Ma	Location *	LS			
Category	Earthen L		GPS Latitude/Longitude					
Calegory				Start		End		
Slope Stability				39.2142	17 °	39.214217 °		
Item			-122.0023	78 °	-122.002378 °			
DWR ID	DWR_MA0001_01_f _ 2016_94							
	Comment Code							

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comment



View of the slope instability along the landside slope.

LM Start	0.25	Rating **	N	Issue No.	97				
LM End	0.25	Issue Type +	Ma	Location *	LS				
Category	Earthen Levee				GPS Latitude/Longitude				
Calegory		Start		End					
Item	Trim / Thi	Trim / Thin Trees			43 °	39.215343	0		
item		-122.0051	00°	-122.005100	0				
DWR ID	DWR_MA0001_01_f _ 2016_97								
	Comment Code								
T5 : Tree s	stumps.								

Inspector Comment

No Photos

\*Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiancy

M : Monitor & Monitor & Maintain

C : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain

\*\* Rating

A : Asceptable Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	0.38	Rating **	A/W	Issue No.		98	
LM End	0.38	Issue Type +	Ma	Location *		WS	
Category	Earthen Levee			GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Slope Stability			39.215878 °		39.215878 °	
ILEIII				-122.007278 °		8° -122.007278°	
DWR ID	DWR_MA0001_01_f _ 2016_98						
		Comn	nent Cod	de			
S2 : Repai where pos		slope damaç	ged by fo	ot traffic an	ıd pr	event access	
		Inspecto	or Comm	nent			

Photo 1 of 1: SP\_2020\_MA0001\_297\_98\_20200226\_00025.jpg

View of the slope instability along the waterside slope.

LM Start	0.53	Rating **	N	Issue No.	101				
LM End	0.53	Issue Type +	Ma	Location *	LS				
Catagony	Earthen Levee			GPS Latitude/Longitude					
Category				Start		End			
Itom	Trim / Thin Trees			39.21580	)8 °	39.215808 °			
Item				-122.00999	95 °	-122.009995 °			
DWR ID	DWR_MA0001_01_f _ 2017_101								
	Comment Code								

T5: Tree stumps.

Inspector Comment

No Photos

LM Start	0.68	Rating **	N	Issue No.	76			
LM End	0.68	Issue Type +	Ma	Location *		WS		
Category	Earthen L	GPS La	atituc	de/Longitude				
Calegory		Start		End				
ltem	Trim / Thi	m / Thin Trees			62 °	39.216562	0	
				-122.0125	63 °	-122.012563	0	
DWR ID	DWR_MA0	001_01_s _ 201	19_76					
		Comn	nent Coo	de				
T5 : Tree s	stumps.							
	Inspector Comment							

No Photos

\* Location LS : Land Side N/A: Not Applicable WS : Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

CR : Crown

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	0.87	Rating **	М	Issue No.	79		
LM End	0.87	Issue Type +	Ма	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category	ategory					End	
Item	Encroachments			39.2177	17 °	39.217717°	
пеш				-122.015717 °		-122.015717 °	
DWR ID	DWR_MA0	001_01_s _ 201	19_79				
		Comn	nent Cod	de			
TR : Tree	TR : Tree or limb						
Inspector Comment							

Photo 1 of 1: SP\_2020\_MA0001\_297\_79\_20200226\_00016.jpg

View of the tree branches and limbs at the landside toe. Spring 2019.

LM Start	1.92	Rating **	М	Issue No.		640	
LM End	1.92	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	atituc	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.2318	66°	39.231866	0
пеш				-122.0154	42 °	-122.015442	0
DWR ID	16430						

### Inspector Comment

Comment Code

DS\_ID:16430 FS\_ID:51852 EP\_NO: 9487

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/3/2017 WS end still partially plugged. (DWR Sutter Yard- AFreitag)10/24/2016 Ws end is till partially plugged.(DWR Sutter Yard- AFreitag)4/25/2016 WS pipe end is still plugged with soil. Rest of the pipe appeared to be in good condition.4/20/2015 WS pipe end is plugged about 50% by soil.6/18/2014 Same as last inspection.12/17/2013 Same as last inspection.7/18/2013 WS pipe end has been reformed but is still clogged about 50% by sediment.10/18/2012 Remove dirt and debris in riser. Outlet deformed and blocked over 50%. Debris-round concrete section on landward side. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0116 for crossing outlet deformed and clogged with dirt.

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, approximately 12-15 feet below the crown. Slide gates in corrugated metal pipe (CMP) riser located on the waterside (WS) slope. Pipe daylights on the landside (LS). (36-inch pipe [HLM 1.97] authorized under Automatic Board Order (ABO) issued as Permit No. 9487, 1974 - Jimeno Rancho) [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual 137, August 1955, (Station 103+18)].

FS Date: 5/19/2017 1:20:29 PM



Overview of levee crown and slopes looking upstream towards crosing.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	1.92	Rating **	М	Issue No. 640 (cont)		640 (cont)
LM End	1.92	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	P LMA Respo	onsibility	39.23186	66°	39.231866
item		-122.0154	42 °	-122.015442		
DWR ID	16430					



View of WS looking upstream at CMP riser on slope.

LM Start	1.92	Rating **	М	Issue No.	640 (cont)
LM End	1.92	Issue Type +	Ma	Location *	



View of LS looking upstream at crossing.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	1.92	Rating **	М	Issue No.		641
LM End	1.92	Issue Type +	Ma	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.23188	30°	39.231880 °
item			-122.01543	32 °	-122.015432 °	
DWR ID 17565						

#### Inspector Comment

Comment Code

DS\_ID:17565 FS\_ID:51853 EP\_NO: 9487

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/3/2017 Ws end still partially plugged. (DWR Sutter Yard- AFreitag)10/24/2016 Ws pipe end still plugged. (DWR Sutter Yard- AFreitag)4/25/2016 WS pipe end still plugged with soil. rest of pipe appears in good condition.4/20/2015 WS pipe end plugged about 50% by soil.6/18/2014 Same as last inspection.12/17/2013 Same as last inspection.7/18/2013 WS pipe end has been reformed but is still partially blocked with dirt and debris.10/18/2012 WS-remove dirt and debris in riser. Outlet deformed and blocked over 50%. Burrow activity near outlet on waterward slope. Debris around concrete section on landward side. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0116 for crossing outlet deformed and clogged with dirt.

FIELD\_STRUCT\_DESC: 2 of 2: 36-inch corrugated metal drainage pipe through the levee, approximately 12-15 feet below the crown. Slide gates in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe daylights on the landside (LS). (36-inch pipe [HLM 1.97] authorized under Automatic Board Order (ABO) issued as Permit No. 9487, 1974 - Jimeno Rancho) [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual 137, August 1955, (Station 103+18)].

FS Date: 5/19/2017 1:21:31 PM

LM Start	1.92	Rating **	М	Issue No.	641 (cont)
LM End	1.92	Issue Type +	Ma	Location *	



View of levee crown and slopes looking upstream at crossing.

Photo 2 of 3: UCIP\_SP\_2020\_51853\_70074.jpg



View of CMP risers located on WS slope.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	1.92	Rating **	М	Issue No.		641 (cont)	
LM End	1.92	Issue Type +	Ma	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	P LMA Respo	onsibility	39.23188	0 °	39.231880 °	
пеш				-122.01543	2 °	-122.015432 °	
DWR ID	17565						



CMP pipe outlet deformed with over 50 percent blockage.

LM Start	2.21	Rating **	М	Issue No.		65
LM End	2.21	Issue Type +	Ma	Location *	CR	
Catagory	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Trim / Thi	39.2357	10 °	39.235710 °		
пеш				-122.013134 °		-122.013134°
DWR ID	DWR_MAG	0001_01_s _ 202	20_65			
		Comn	nent Cod	de		
T4: Trim t	rees over	roadway to at	least 12	feet above	grou	und level.
Inspector Comment						
1						

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	2.23	Rating **	М	Issue No.		642
LM End	2.23	Issue Type +	Ма	Location *		
Supplemental				GPS Lat	itud	e/Longitude
Calegory	Category			Start		End
Item	DWR UC	P LMA Respo	onsibility	39.23599	3 °	39.235993
пеш	Rem				o °	-122.012970 °
DWR ID	16429					

#### Inspector Comment

Comment Code

DS\_ID:16429 FS\_ID:51854 EP\_NO: 9472

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/3/2017 LS inlet partially plugged with soil. Some

debris still present inside riser. (DWR Sutter Yard-

AFreitag)10/24/2016 Debris still inside of riser.(DWR Sutter Yard-AFreitag)4/25/2016 Pipe still inside of riser and LS end plugged about 50% by soil.4/20/2015 Same as last inspection.6/18/2014 Same as last inspection.12/17/2013 Same as last inspection.7/18/2013 Same as last inspection.10/18/12 Remove debris from riser.

Landward inlet is blocked by over 50%. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0128 for sediment build up at inlet (landward side) and debris inside riser.

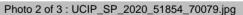
FIELD\_STRUĆT\_DESC: 54-inch corrugated metal drainage pipe through the levee, approximately 12-15 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. 48-inch CMP at landside (LS) slope. This crossing crosses the levee at an angle. (54-inch pipe [HLM 2.29] authorized under Automatic Board Order (ABO) issued as Permit No. 9472, 1974 - Ballard) ) [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual 137, August 1955, (Station 120+00)].

FS Date: 5/19/2017 1:23:34 PM





View of levee crown looking downstream at crossing. CMP riser located on WS shoulder.





View of WS looking at slope and channel.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable M: N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence

En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	2.23	Rating **	М	Issue No.		642 (cont)	
LM End	2.23	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	P LMA Respo	onsibility	39.23599	93 °	39.235993 °	
item				-122.01297	70 °	-122.012970 °	
DWR ID	16429						



View of outlet located at WS toe.

LM Start	2.25	Rating **	М	Issue No.		643		
LM End	2.25	Issue Type +	Ma	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	P LMA Respo	onsibility	39.23617	78 °	39.236178 °		
пеш			-122.0128°	12 °	-122.012812 °			
DWR ID	16428							

### Comment Code

#### Inspector Comment

DS\_ID:16428 FS\_ID:51855 EP\_NO: 9467

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/3/2017 Abanoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)10/24/2016 Abandoned.(DWR Sutter Yard- AFreitag)4/25/2016 Abandoned crossing. Unable to locate any WS and LS pipe ends.4/20/2015 Same as last inspection.6/18/2014 Same as last inspection.12/17/2013 Same as last

inspection.7/18/2013 Same as last inspection.10/18/2012 Only riser visible. Debris and sediment blocking gate. Gate inside riser is buried and non-functional. If crossing is abandoned, owner needs to properly abandon. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0132 no culvert through the levee is visible here.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, approximately 12-15 feet below the crown. Slide gate in CM pipe riser on the waterside (WS) slope. No signs of inlet visible on the landside (LS). (24-inch pipe [HLM 2.31] authorized under Automatic Board Order (ABO) issued as Permit No. 9467, 1974 - Lovell E. Spurgeon) [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual 137, August 1955, (Station 120+60)].

FS Date: 5/19/2017 1:48:04 PM

#### Photo 1 of 3: UCIP\_SP\_2020\_51855\_70085.jpg



Overview of levee crown looking upstream at crossing.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	2.25	Rating **	М	Issue No.		643 (cont)	
LM End	2.25	Issue Type +	Ma	Location *			
Category				Supplemental GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.23617	78 °	39.236178°	
item				-122.0128 <sup>-</sup>	12 °	-122.012812 °	
DWR ID	16428						



View of WS slope and toe.

LM Start	2.25	2.25 Rating **		Issue No.	643 (cont)
LM End	2.25	Issue Type +	Ma	Location *	



Unable to locate WS outlet.

LM Start	3.22	Rating **	М	Issue No.		61				
LM End	3.70	Issue Type +	Ма	Location *		LS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude				
Category				Start		End				
ltem Vegetation				39.2493	09 °	39.256058 °				
				-122.008061 °		-122.009862 °				
DWR ID	DWR ID DWR_MA0001_01_s _ 2020_61									
		Comn	nent Cod	de						
		grass and wee	ds on th	e levee slo	pes a	and				
easements	S.									
		Inspecto	or Comm	nent						

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	3.33	Rating **	М	Issue No.		646		
LM End	3.33	Issue Type +	Ма	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory	Calegory					End		
Item	DWR UC	P LMA Respo	onsibility	39.25084	13 °	39.250843 °		
пеш				-122.00799	92 °	-122.007992 °		
DWR ID	16426							
Comment Code								

#### Inspector Comment

DS\_ID:16426 FS\_ID:51859 EP\_NO: 9490

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/3/2017 Sediment build up in WS pipe end. WS slide gate stem bent but it does not affect its operation. (DWR Sutter Yard- AFreitag)10/24/2016 WS slide gate stem is still bent. (DWR Sutter Yard- AFreitag)4/25/2016 WS slide gate is slightly bent. Rest of crossing appears to be in good condition. 4/20/2015 LS inlet still has some minor sediment build up. Needs to be cleaned.6/18/2014 Same as last inspection.12/17/2013 Same as last inspection.7/18/2013 WS slide gate looks to be in good condition but stem is slightly bent. Not sure if bend will hinder gates operation or not. LS inlet is still blocked by minor sediment build up.10/18/2012 LS pipe slightly deformed and sediment build up blocking about 30% of opening; need to check the condition of the slide gate-need photo. Metal marker down. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0187 for sediment build up at landward toe.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, approximately 12-15 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. (36-inch pipe [HLM 3.78] authorized under Automatic Board Order (ABO) issued as Permit No. 9490, 1955 - Charles & Virginia Yerxa) [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual 137, August 1955, (Station 177+67)].

FS Date: 5/19/2017 1:53:31 PM



View of LS looking upstream.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	3.33	Rating **	М	Issue No.		646 (cont)	
LM End	3.33	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UCI	P LMA Respo	onsibility	39.25084	43 °	39.250843	
item				-122.00799	92 °	-122.007992	
DWR ID	16426						



View of WS looking upstream.

LM Start	3.33	Rating **	М	Issue No.	646 (cont)
LM End	3.33	Issue Type +	Ma	Location *	

Photo 3 of 3: UCIP\_SP\_2020\_51859\_70111.jpg



View of WS slope, riser with slide gate, and outlet.

3								
itude								
End								
.257125°								
.012648°								
DWR ID DWR_MA0001_01_f _ 2013_50								
Inspector Comment								
DWR ID DWR_MA0001_01_f _ 2013_50  Comment Code  V4 : Elderberries are blocking visibility and flood fight capability.								

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	3.90	Rating **	М	Issue No.		103	
LM End	3.90	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
			Start		End		
Item	, Animal Control			39.25732	27 °	39.257327 °	
item			-122.0129	14 °	-122.012914°		
DWR ID DWR_MA0001_01_s _ 2019_103							
Comment Code							

A3: No rodents visible, but rodent burrows visible; need to backfill and

compact or grout burrows.

Inspector Comment

Rating \*\* Issue No. LM Start 3.92 M 66 Issue Type + Location \* LS LM End 3.92 Ma Earthen Levee GPS Latitude/Longitude Category Start Fnd **Animal Control** 39.257553° 39.257553 ° Item -122.013063 ° -122.013063 ° DWR\_MA0001\_01\_f \_ 2019\_66 DWR ID Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

No Photos

Rating \*\* Issue No. LM Start 4.98 72 4.98 Issue Type + Ma Location \* LS LM End Earthen Levee GPS Latitude/Longitude Category Start End **Animal Control** 39.264888° 39.264888 ° Item -122.016066 ° -122.016066 DWR ID DWR\_MA0001\_01\_f \_ 2019\_72

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

\* Location LS : Land Side

N/A: Not Applicable

WS : Water Side

U : Unacceptable

A : Acceptable
M : Minimally Acceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	5.00	Rating **	М	Issue No.		80	
LM End	5.00	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Itom	Animal Co	ontrol		39.26484	10 °	39.264840 °	
пеш	Item				37 °	-122.016437 °	
DWR ID DWR_MA0001_01_f _ 2019_80							
Comment Code							

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



Photo 1 of 1: SP\_2020\_MA0001\_297\_80\_20200226\_00017.jpg

View of the rodent activity at the landside toe. Fall 2019.

LM Start	5.43	Rating **	М	Issue No.		82		
LM End	5.43	Issue Type +	Ма	Location *	LS			
Category Earthen Levee			GPS Latitude/Longitude					
				Start		End		
Item	Animal Control			39.26786	88°	39.267868 °		
item			-122.02279	95 °	-122.022795 °			
DWR ID DWR_MA0001_01_f _ 2019_82								

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

LM Start	5.77	Rating **	М	Issue No.	35			
LM End	5.77	Issue Type +	Ma	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
				Start		End		
Item	Vegetatio	n		39.27277	73 °	39.272773	0	
item				-122.02329	90°	-122.023290	0	
DWR ID DWR_MA0001_01_s _ 2012_35								
Comment Code								

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

\* Location

N/A: Not Applicable

LS : Land Side WS : Water Side CR : Crown

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	6.24	Rating **	U	Issue No.		657	
LM End	6.24	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UCI	P LMA Respo	onsibility	39.27946	62 °	39.279462 °	
item				-122.02246	61 °	-122.022461 °	
DWR ID	16446						

#### Inspector Comment

Comment Code

DS\_ID:16446 FS\_ID:53049 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

FS Date: 10/1/2018 2:59:44 PM

UCIP Comments: 10/1/2018 PVC pipe underneath the slide gate that is located inside CMP riser on WS shoulder was restored and blocks gate from closing. Sediment built up at the bottom of CMP riser. PVC pipe needs to be removed in order to properly close slide gate. (O.Yakimov -DWR UCIP)5/3/2017 Pipe leaked during the Jan/Feb 2017 high water event. Sand bags were placed at both the LS and WS outlets as well as down inside the standpipe to slow the water flow. The 5inch pvc was cut away but the slide gate sould still not close fully. Suspect sediment build up was in the bottom of the stand pipe was blocking the gate. Inside of pipe should be cleaned out. (DWR Sutter Yard-AFreitag)10/24/2016 Pvc was back running through the crossing and blocking the screwgate. photo attatched(DWR Sutter Yard-AFreitag)9/28/2016 Crossing has been downgraded from Urgent to Non-Urgent 5-inch PVC pipe was cut to allow the slide gate to close. Need to contact owner to remove unauthorized pipe to comply with Title 23. (DWR UCIP - omagana)4/25/2016 5 inch pvc pipe running through crossing has been cut out to allow the slide gate to close. (DWR Sutter Yard - afreitag)4/20/2015 5inch pvc is still present blocking slide gate from closing. WS end of pipe has been exposed so there is no way to stop water from flowing through pipe during highwater times. (DWR Sutter Yard - afreitag)6/23/2014 Same as last inspection. There is no way to stop water from flowing though pipe during high water times. (DWR Sutter Yard - afreitag)12/17/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/18/2013 Same as last inspection. (DWR Sutter Yard - afreitag)10/19/2012 Unauthorized 5 inch PVC pipe running through 36 inch crossing. 5 inch PVC crossing prevents slide gate from closing during high water. Debris and sediment inside riser. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0258 for 5 inch PVC pipe running through culvert. (DWR UCIP - omagana) FIELD STRUCT DESC: 36-inch steel (not corrugated metal, as referenced in O&M manual) drainage pipe through the levee, approximately 14-16 feet below levee crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe also visible on the landside (LS). [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual 137, August 1955, (Station 331+31)].



View of levee crown at crossing.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

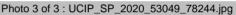
LM Start	6.24	Rating **	U	Issue No.	657 (cont)	
LM End	6.24	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.27946	62 °	39.279462 °
item			-122.02246	61 °	-122.022461 °	
DWR ID	16446					

# Photo 2 of 3 : UCIP\_SP\_2020\_53049\_78243.jpg



View of CMP riser at WS shoulder.

LM Start	6.24	Rating **	U	Issue No.	657 (cont)
LM End	6.24	Issue Type +	Ma	Location *	





Pipe at LS toe.

LM Start	6.25	Rating **	М	Issue No.		67		
LM End	7.27	Issue Type +	Ma	Location *	LS			
Category	Catagoria Earthen Levee			GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		39.2795	61 °	39.294147 °		
item				-122.0224	49 °	-122.021449 °		
DWR ID DWR_MA0001_01_s _ 2020_67								
		Comn	nent Cod	de				
V1 : Contro	ol annual g	grass and wee	ds on th	e levee slo	pes	and		
easements	S							
		Inspecto	or Comm	nent				

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	6.25	Rating **	М	Issue No.		78
LM End	7.27	Issue Type +	Ma	Location *		WS
Category	Earthen Levee					e/Longitude
Calegory				Start		End
Item	Vegetatio	n		39.2795	61 °	39.294147 °
пеш				-122.0224	49 °	-122.021449 °
DWR ID	DWR_MA0	001_01_s _ 202	20_78			
		Comn	nent Cod	de		
V1 : Contre easements		grass and wee	ds on th	e levee slo	oes :	and
		Inspecto	or Comm	nent		

No Photos

LM Start	6.40	Rating **	М	Issue No.		658
LM End	6.40	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	ituc	le/Longitude
Calegory			Start		End	
Item	DWR UC	P LMA Respo	onsibility	39.28172	1°	39.281721 °
item				-122.02189	4 °	-122.021894°
DWR ID	16425					

#### Comment Code

### Inspector Comment

DS\_ID:16425 FS\_ID:51874 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/3/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/24/2016 Abandoned(DWR Sutter Yard- AFreitag)4/25/2016 Abandoned crossing.4/20/2015 Same as last inspection.6/23/2014 Same as last inspection.12/17/2013

last inspection.6/23/2014 Same as last inspection.12/17/2013 Same as last inspection.7/18/2013 Same as last inspection.7/18/2013 Same as last inspection.10/19/2012 Need to be properly abandoned concrete structure; plate covers concrete box; Concrete headwall damaged. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0262 for damage to concrete structure (vertical 2 inch wide cracks and spalling visible). FIELD\_STRUCT\_DESC: \*ABANDONED\* 72-inch corrugated metal (precast concrete) drainage pipe through the levee at an unknown depth below the crown. Structure is blocked on the waterside (WS) end with 3-foot concrete plug installed in 1980. Slide gate in concrete well on the landside (LS) shoulder. Concrete headwall at both toes. WS headwall not found. [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual 137, August 1955, (Station 339+74)]. FS Date: 5/23/2017 10:13:24 AM



View of WS no structure features visable.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

# **Sutter Maintenance Yard Maintenance Area 0001**

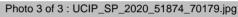
Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	6.40	Rating **	М	Issue No.	658 (cont)		
LM End	6.40	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UC	P LMA Respo	nsibility	39.2817	21 °	39.281721	0
itelli					94 °	-122.021894	0
DWR ID	16425						



Overview of levee crown looking downstream at crossing.

LM Start	6.40	Rating **	M	Issue No.	658 (cont)
LM End	6.40	Issue Type +	Ma	Location *	





View of structure located in LS.

		D-4: **		Innun Nin				
LM Start	7.33	Rating **	М	Issue No.		68		
LM End	7.51	Issue Type +	Ma	Location *	WS			
Category	Catagoni Earthen Levee					e/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		39.2950	54 °	39.297549°		
item				-122.0215	31 °	-122.021729 °		
DWR ID	DWR ID DWR_MA0001_01_s _ 2020_68							
		Comn	nent Cod	de				
V1 : Contr	ol annual g	rass and wee	ds on th	e levee slo	pes a	and		
easements	3.							
		Inspecto	or Comm	nent				

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	7.36	Rating **	С	Issue No.		112		
LM End	7.36	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Trim / Thi	n Trees		39.2954	70°	39.295470	0	
пеш		-122.021606 °		-122.021606	0			
DWR ID DWR_MA0001_01_s _ 2019_112								
Comment Code								

Comment Code
T2 : Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

Trees smaller than 4 inches in diamater should be removed from the landside toe.

No Photos

LM Start	7.62	Rating **	М	Issue No.		70	
LM End	8.01	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Vegetation			39.2973 <sup>-</sup>	14 °	39.298151 °		
item			-122.02380	04 °	-122.030766 °		
DWR ID DWR_MA0001_01_s _ 2020_70							
Comment Code							

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

LM Start	10.13	Rating **	A/W	Issue No.		18	
LM End	10.13	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Item Erosion / Bank Caving			39.3286	97 °	39.328697 °		
item				-122.0292	62 °	-122.029262 °	
DWR ID	DWR ID DWR_MA0001_01_s _ 2012_18						
Comment Code							

E1: Note and monitor erosion site.

Inspector Comment



View of the erosion along the waterside of the levee.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	10.32	Rating **	A/W	Issue No.	6		
LM End	10.41	Issue Type +	Ма	Location *	WS		
Supplemental				GPS Latitude/Longitude			
Calegory				Start	End		
Item	2017 USACE Erosion Survey			39.33144	47 °	39.332716 °	
пеш				-122.02944	40 °	-122.029953 °	
DWR ID DWR_ST0003_01_f _ 2018_1							
Comment Code							

#### Inspector Comment

2017 Site ID: SAC 157.7 R

Status: Eroding

2017 Field Notes: Vertical face of clay sand bank, new tree popout.

Bank continues to erode.

Site History: 2004 - Slowly eroding but near vertical with no vegetation to hold it. 2005 - Erosion is close to levee toe but not into the levee section yet. 2010 - Some new toe scour.



USACE 2013 Photo #1

LM Start	11.01	Rating **	М	Issue No.		69	
LM End	11.01	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Animal Control			39.34080	)3 °	39.340803 °		
item			-122.03286	° 86	-122.032868 °		
DWR ID DWR_MA0001_01_s _ 2018_69							
		_	_				

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

# Photo 1 of 1 : SP\_2020\_MA0001\_297\_69\_20200226\_00013.jpg



View of the rodent holes along the landside slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	11.08	Rating **	С	Issue No.		95
LM End	11.13	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory			Start		End	
ltem Vegetation			39.3417	00 °	39.342386 °	
				-122.032447 °		-122.032308 °
DWR ID	DWR_MA0	001_01_f _ 201	9_95			
		Comn	nent Coc	de		
V1 : Contro		grass and wee	eds on th	e levee slo	pes	and
Inspector Comment						

No Photos

Rating \*\* Issue No. 12.16 Μ 77 LM Start 12.70 Issue Type + Location \* WS LM End Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 39.356925° 39.359823 ° Item -122.027870 ° -122.019328 ° DWR\_MA0001\_01\_s \_ 2020\_77 DWR ID Comment Code

No Photos

V1: Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

	LM Start	15.86	Rating **	N	Issue No.	131			
	LM End	15.86	Issue Type +	Ma	Location *		LS		
	Category	Earthen Levee			GPS Latitude/Longitude				
Category					Start		End		
	Trim / Thin Trees			39.4008	75 °	39.400875	0		
	пеш				-122.0096	80 °	-122.009680	0	
	DWR ID DWR_MA0001_01_f _ 2016_131								
	Comment Code								

No Photos

T5: Tree stumps.

CR : Crown

Inspector Comment

About 7 stumps are present on the landside slope and toe.

\* Location LS : Land Side N/A: Not Applicable WS : Water Side

A : Acceptable M : Minimally Acceptable

U : Unacceptable

N: Not Inspected/Rated C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	15.96	Rating **	М	Issue No.	99		
LM End	15.96	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start End			
ltom	Animal Co	ontrol		39.4021	84 °	39.402184	0
пеш	Item				75 °	-122.009375	0
DWR ID DWR_MA0001_01_f _ 2019_99							
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

LM Start	16.19	Rating **	М	Issue No.		71		
LM End	16.19	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Animal Control				39.40543	85 °	39.405435 °		
item				-122.008598 °		-122.008598 °		
DWR ID	DWR_MA0	001_01_f _ 201	8_71					

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of the rodent holes along the landside slope.

LM Start	16.35	Rating **	A/W	Issue No.		9	
LM End	16.58	Issue Type +	Ma	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 USA	ACE Erosion S	Survey	39.4078	37 °	39.411111	0
пеш				-122.0087	63 °	-122.009238	0
DWR ID	DWR_ST0	010_02_f _ 202	2_7				
		Comn	nent Cod	de			

#### Inspector Comment

2017 Site ID: SAC 164.3 R

Status: Eroding

2017 Field Notes: New erosion along entire site.

Site History: Erosion site added in 1997 and removed in 2005. 2009 - Site added back in, hard toe with slow moving erosion. Potential

geotechnical failure. 2011 - Site extended downstream.



USACE 2013 Photo #1

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2020

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	03/10/2020 03/10/2020	Makar Sokol

LM Start	16.35	Rating **	A/W	Issue No.		9 (cont)	
LM End	16.58	Issue Type +	Ma	Location *	WS		
Catagony	Supplemental			GPS Latitude/Longitude			
Category				Start		End	
Item	2017 USACE Erosion Survey		39.4078	37 °	39.411111°		
itelli				-122.0087	63 °	-122.009238 °	
DWR ID	DWR STO	010 02 f 202	2 7				



USACE 2013 Photo #2